

**Amendments to the Claims:**

Please amend claims 1, 22 and 24 as shown in the listing of claims that follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) A method of reducing or eliminating neoplastic cells in an ex vivo mixture of normal, hematopoietic cells and neoplastic cells by contacting said mixture with a vesicular stomatitis virus, wherein the mixture is a suspension.
2. (canceled).
3. (Original) A method as in claim 1 wherein said neoplastic cells are leukemia cells.
4. (Original) A method as in claim 1 wherein said hematopoietic cells are marrow cells.
- 5 (Original) A method as in claim 1 wherein said hematopoietic cells are peripheral blood cells.
- Claims 6-9 (canceled).
10. (Withdrawn) A method as in claim 7 wherein said non-segmented, negative sense RNA virus is a paramyxovirus.

11. (Withdrawn) A method as in claim 10 wherein said paramyxovirus is Newcastle disease virus.
12. (Withdrawn) A method as in claim 6 wherein said single-strand RNA virus is Sindbis virus.
13. (Withdrawn) A method as in claim 2 wherein said RNA virus is a double-strand RNA virus.
14. (Withdrawn) A method as in claim 13 wherein said double strand RNA virus is a reovirus.
15. (Withdrawn) A method as in claim 14 wherein said reovirus is reovirus type 3.
16. (Withdrawn) A method as in claim 13 wherein said reovirus is clonal.
17. (Previously presented) A method as in claim 1 wherein said virus is replication-competent .
18. (Withdrawn) A method as in claim 2 wherein said RNA virus is a replication-incompetent RNA virus.
19. (Original) A method as in claim 1 wherein said neoplastic cells are lymphoma cells.
20. (Previously presented) A method as in claim 1 further comprising administering a chemotherapeutic agent to the mixture before, during or after contacting with said virus.
21. (Previously presented) A method as in claim 1 further comprising administering an interferon to the mixture before, during or after contacting with said virus.

22. (Currently amended) A method of treating cancer in a mammal comprising:

- a) removing bone marrow or peripheral blood cells from said mammal as a suspension,
- b) contacting said suspension of bone marrow or peripheral blood cells ex vivo with a vesicular stomatitis virus,
- c) performing myeloablative treatment on said mammal, and
- d) transplanting into said mammal the purged hematopoietic cells of step b.

23. (Original) A method as in claim 22 wherein said myeloablative treatment is high dose chemotherapy.

24. (Currently amended) A method of treating cancer in a mammal receiving a bone marrow or peripheral blood stem cell transplant comprising contacting the suspension of harvested ~~cells of~~ transplant cells ex vivo with a vesicular stomatitis virus, and administering the purged cells to said mammal.